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# **NAVAL POSTGRADUATE SCHOOL**

**MONTEREY, CALIFORNIA**

## **THESIS**

**PROCESS ANALYSIS OF BASIC ALLOWANCE FOR  
HOUSING (BAH) WITHIN THE MILITARY PERSONNEL,  
MARINE CORPS (MPMC) APPROPRIATION**

by

Dillon D. Vaden

March 2005

Thesis Co-advisors:

Bill R. Gates  
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**PROCESS ANALYSIS OF BASIC ALLOWANCE FOR HOUSING (BAH)  
WITHIN THE MILITARY PERSONNEL, MARINE CORPS (MPMC)  
APPROPRIATION**

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Captain, United States Marine Corps  
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Submitted in partial fulfillment of the  
requirements for the degree of

**MASTER OF SCIENCE IN MANAGEMENT**

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**NAVAL POSTGRADUATE SCHOOL  
March 2005**

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## **ABSTRACT**

This thesis evaluates the current methodologies used to determine BAH requirements for MPMC Budget Estimate Submissions (BES) and provides recommendations to improve the management of the BAH program within the USMC. The research includes a detailed analysis of BAH requirement methodologies throughout DoD, BAH program management and addresses the problem of the MPMC underfunded appropriation since FY01. As the Basic Allowance for Housing (BAH) accounts for approximately 10% of the MPMC appropriation (\$1.053B of \$9.5B), BAH execution shortfalls result in \$30-\$40M (3% variance) deficits annually. As a result, funds must be reprogrammed, or taken from other programs to pay for these shortfalls. This thesis recommends eliminating certain inefficiencies within the BAH process. Most important of these inefficiencies is eliminating the information gap that exists between OSD and the service level P&Rs. Eliminating this gap would allow the services to avoid execution bills associated with BAH shortfalls. The current BAH program meets its goal of providing service members fair compensation for housing; however, the current PPBE system, information flow, and technology need adjustments to allow for a more efficient BAH program.



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## **I. INTRODUCTION**

### **A. BACKGROUND**

During Fiscal Year 2004 (FY04), the Department of Defense (DOD) allocated \$10.7 billion to pay for the Basic Allowance for Housing (BAH) for an eligible strength of 1.39 million active-duty military service members (DODB, 2004). The BAH entitlement is a component of the service Military Personnel (MILPERS) President's Budget (PB) appropriation. According to DOD, BAH is an allowance to offset the cost of housing when members do not receive government-provided housing. A member's BAH rate depends upon their location, paygrade and whether or not they have dependents. BAH rates are set by surveying the cost of rental properties in each geographic location. The rates are established such that members in each pay grade, independent of location, pay approximately the same out-of-pocket costs. Therefore, BAH rates in high-cost areas will be much greater than those in low-cost areas. (<http://www.dod.mil/militarypay/pay/bah/index.html>). Additionally, there are different types of BAH to compensate for special situations.

Due to legislative changes and DOD initiatives to improve military members' quality of life (QOL), BAH costs have risen dramatically in recent years. Since FY00, BAH has increased 73 percent across all four services, from \$6.2 billion to \$10.7 billion. This is the highest increase among allowances for military members. Additionally, DOD has been directed to pay BAH based on local housing market rates that are not determined until the first quarter of the year of budget execution. As a result, since FY01, BAH expenditures throughout the DOD have exceeded PB budget estimate submissions (BES) funding levels.

According to DOD, BAH consists of the following categories: "BAH with/without dependents, BAH-II, BAH Difference (BAH-DIFF), Partial BAH, Overseas Housing Allowance (OHA), and Family Separation Housing (FSH). Basic Allowance for Housing also consists of the former allowances known as basic allowance for quarters and variable housing allowance." (DODFMR, 2004) In order for a military member to be eligible to receive BAH, he or she must be on active duty. BAH varies according a

member's grade in which they are serving or appointed for basic pay purposes, dependency status and the permanent duty station (PDS) assigned. However, BAH is not payable to members who are assigned to government quarters appropriate for their rank. (DODFMR, 2004) The services allocate over 95 percent of BAH budget to pay 'BAH with/without dependents'. Thus, when BAH is mentioned throughout this study, it will refer to 'BAH with/without dependents' unless specifically noted.

Various BAH data are used as inputs to the Department of Defense (DOD) Planning, Programming, Budgeting, and Execution (PPBE) process. PPBE is the process used to determine PB funding requirements. The Secretary of Defense (SECDEF) is ultimately responsible for determining the costs of adequate housing in each of the Military Housing Areas (MHA) for the military members that are entitled to BAH. DOD conducts annual surveys to determine the cost of housing by MHA. "The determination for housing allowances is based upon the costs of adequate rental housing for civilians with comparable income levels in the same area. The amount paid for BAH the preceding year is adjusted to reflect changes during the year." (DODFMR, 2004) BAH has a rate protection clause in which the monthly BAH amount paid to a military member will not be reduced as a result of changes in housing costs in the MHA, changes in the national monthly cost of housing, or promotion of the member. (DODFMR, 2004)

As noted earlier, since fiscal year 2001, each military service's PB appropriation for BAH has been under funded. BAH computations for the Budget Estimation Submissions (BES) are calculated by using previous year execution data and an inflation factor provided by Office of the Secretary of Defense (OSD). "While the inflation factor and previous year execution data are generally accurate, the Marine Corps has experienced execution year BAH shortfalls between \$30-\$40M (3% variance) from FY01 through FY04. As a result, funds must be reprogrammed, or taken from other programs to pay for the shortfall. Moreover, the fact that actual BAH rates are not set until January of the year of execution exacerbates the funding dilemma." (D.Edwards personal communication, November 22, 2004) Recently, personnel at Headquarters, Marine Corps (HQMC) reported that the FY05 BAH bill was expected to be approximately \$7M and for the Army is projected to be over \$100M. (D.Edwards personal communication, November 22, 2004)

The fact that the USMC allocates the highest percentage of its budget to manpower expenditures exacerbates this situation. The USMC allocates approximately 61 percent of its Total Obligation Authority (TOA) towards paying manpower related (MPMC/RPMC) expenditures (Edwards, 2005). Flexibility to reprogram funds within the MPMC and RPMC accounts is very limited, as over 99 percent of expenditures are entitlements such as pay and allowances, BAH, retirement accrual, and special pays. Since entitlements must be paid and are a direct function of the payment rate and manpower strength, the USMC cannot avoid these expenses. Simply stated-if the Marine is on active duty, he or she must be paid as prescribed by law (Title 37, USC). The remaining one percent is allocated to recruiting and retention bonuses, like Enlistment Bonus (EB) and Selective Reenlistment Bonus (SRB). While the Marine Corps could 'avoid' these expenditures, it would degrade its ability to recruit and retain Marines. Thus, there is practically no room for error within the MILPERS appropriation. This means that the Operations and Maintenance (O&M) and Procurement (PMC) appropriations are likely 'bill-payers' in the event that MILPERS accounts such as BAH over-execute. Since the O&M and PMC accounts are small relative to the other services, MPMC shortfalls can have a severe effect on the O&M and PMC appropriations.

Adding to the complexity of projecting actual BAH expenditures, each service has a different methodology for pricing future costs of BAH as an input to the PPBE process. Actual budget execution (BAH expenditures) is the primary input, along with projected military strength and dependency rates. As noted earlier, OSD provides planning factors for budget estimate submission (BES) development. However, since the actual rates are a direct function of market surveys, historical execution is likely to vary from actual execution. Accordingly, this thesis will evaluate the current state of BAH pricing models within DOD and provide recommendations for improvement.

From an organizational perspective, management of BAH within the DOD is complicated. BAH program management has many stakeholders throughout DOD and within the USMC. For example, internal to the USMC, BAH policy matters are under the cognizance of the Deputy Commandant, Manpower and Reserve Affairs. Housing infrastructure decisions that impact on BAH, such as the Privatization Partnership Venture (PPV), are under the cognizance of the Deputy Commandant, Installations and

Logistics (I&L). It is projected that PPV will result in higher BAH costs in the future. Management of the MPMC budget resides within the Deputy Commandant (DC) of Programs and Resources (P&R). Externally, all services are impacted by the Legislative Branch (Congress), the Executive Branch (principally OMB), OSD, and the communities that host military installations. The most important stakeholder is the military member and his or her family members. Accordingly, this thesis will evaluate the roles played by internal and external stakeholders and the effectiveness the current BAH program and related initiatives are having on readiness and retention.

The private sector is also a BAH stakeholder. Public Private Venture (PPV) housing is an attempt by the DOD to reduce government dollars that are spent on military housing while at the same time providing a higher level of quality housing. (DODMHP, 2004) While PPV is proving to be a useful solution to one aspect of the military housing issue, it still raises a few concerns among BAH policy makers.

One concern relates to the method in which contracts are awarded to contractors within the private sector. “There is not a standard method used in the awarding process. In other words, a contractor in Quantico, VA may be awarded a contract based on different requirements than a contractor in San Diego, CA. This appears to make the quality and availability of housing different in each of the Military Housing Areas (MHA).” (C. McCloskey, personal communication, February 2, 2005)

In some cases, there are MHAs that do not have a local government housing office responsible for reporting accurate and unbiased housing data to the OSD. “There are some concerns that deal with how the private housing contractor is responsible for reporting housing data such as local rental and housing prices to the OSD. This would appear to create a conflict of interest with the private contractor and the OSD.” (C. McCloskey, personal communication, February 2, 2005)

One example includes a private housing contractor that surveys the most expensive area within the local MHA and reports the price information as the average local housing price. This could influence the increase of the future BAH rate for that MHA and in return would further increase the level of BAH expenditures. Another goal

of this thesis is to provide some insight into the PPV process and to evaluate its effectiveness to meet DOD housing demands.

Office of the Secretary of Defense (OSD) and the Runzheimer International consultant firm are involved in the data collection process. They continuously evaluate housing standards and compare them to those in the civilian sector. Each year they update BAH rates for the DOD and publish them on November 1<sup>st</sup>. However, this occurs one month after the fiscal year begins. Once they are published they become effective at the beginning of the next calendar year, which is only two months after they are published.

Prior to the DOD publishing the BAH rates, each branch of service is required to submit their estimation of the future fiscal year's BAH expenditures which are based on their estimated rates and indices. This becomes a challenge to all of those involved in the BAH planning process.

This is a problem that becomes evident after the actual BAH rates are published. Once they are published, the services are able to determine whether their estimates were correct. Even if the percentage difference between the actual and estimated amounts is small, this may be a large difference in terms of total dollar amounts. For example, the total Marine Corps BAH budget is so large that if the budget forecasts are off only by two percent, the dollar amount will be a large figure in comparison to other budget items within the Military Personnel Marine Corps (MPMC).

This appears to be a trend across all four services. The following are missed estimates by each service for fiscal years 2001-2003. The Air Force missed their BAH estimates by 2.7%, 15.8% and 17.9%. The Marine Corps missed their BAH estimates by 8.2%, 5% and 20.5%. Lastly, the Navy missed their BAH estimates by 7.2%, 6.8% and 11.8%. For 2001, the Army's BAH underestimated BAH by 4.5%. BAH expenditures for fiscal years 2002 and 2003 were not available. (USDComptroller, 2005)

Other challenges include numerous variables that impact rental prices and are used in the BAH estimation process. These variables have a fluid nature and may continuously change for several different reasons. This creates a wide range of uncertainty in the BAH budget estimation process for the services.



Legislative changes have also impacted BAH. As noted earlier, the BAH program has been funded to effect the transition to market-based-rates, to fund anticipated future housing rate increases and to reduce out-of-pocket (OOP) expenses for service members. This is an effort by the FY2000 National Defense Authorization Act (FY00 NDAA) to increase retention and recruiting among the services. Annually, the NDAA is used by legislators to shape military pay and allowances to support military readiness. Since BAH plays a major part in a military member's compensation, it is likely that Congress will direct changes in the future. As a part of this thesis, I intend to explore the impact of legislative action has on BAH.

## **B. PURPOSE OF THE STUDY**

This research examines the environment in which BAH requirements are determined and will investigate pertinent areas and stakeholders internal and external to DOD. Additionally, it examines the accuracy of BAH pricing models used by the services in the Manpower budget submission process. One goal of this thesis is to analyze the different methodologies used by each service to project their BAH estimates prior to their BES. Another goal is to evaluate existing computation models through functional, operational, and economic analyses and provide recommendations for improvement. Additionally, I intend to examine the impact that recent legislative and policy changes like PPV have had on BAH and its role in improving readiness and retention.

## **C. RESEARCH QUESTIONS**

The primary research question of this thesis answers 'why' the BAH program within the DOD has been under funded since FY01. By understanding the factors responsible for this variance, I intend to identify how accurate the current system is in predicting total BAH expenditures for the Marine Corps. How are the BAH amounts calculated for each year's budget? What causes fluctuations and variations in the computations? What are the requirements used in estimating the budget proposal? The secondary questions include:

1. What are the variables used in the pricing model computations?
2. How do the computations differ from the Marine Corps to other branches of service?
3. How much are the actual fluctuations from the estimated amount?

4. How can the pricing models be upgraded to accurately estimate the correct amounts?
5. Impact of recent legislative (NDAA 00 and other acts of Congress) and policy (PPV) changes have had on readiness (retention/recruiting)

**D. BENEFITS OF THE STUDY**

The results of this thesis will help increase the accuracy of the BAH estimation process prior to publishing the actual BAH rates and provide information to assist DoD budget analysts and policy analysts in respective service MILPERS appropriations manage BAH programs more effectively.

**E. SCOPE OF THE THESIS**

The thesis will review service MILPERS President's Budget Estimate submissions, current BAH pricing models, the budget process for BAH entitlements, and the fluctuations in the actual and estimated amounts and recent legislative and BAH policy initiatives. The thesis will conclude with recommended changes to the current pricing models to more accurately reflect the actual expenditures on BAH and service specific BAH policy recommendations.

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## **II. LITERATURE REVIEW**

To understand the BAH process, it is important to review and understand related legislation, DOD regulations, and the results from historical studies and research. This literature review begins with pertinent legislative actions and DOD's definition of BAH according to its financial regulation. Once BAH is defined, the BAH primer will explain how housing information is collected and used to compute the allowance. Included are reviews of budget and past research associated with the history of BAH.

### **A. U.S. CODE TITLE 37, PAY & ALLOWANCES CH. 7, SECTION 403**

BAH is an important allowance because it is an entitlement and does not have a discretionary nature. This entitlement is a legal obligation by the federal government to make BAH payments to any service member that meets the eligibility requirement. As prescribed in U.S. Code, BAH is a general entitlement provided by law to military service members. Each military service member that is entitled to basic pay is also entitled to monthly BAH rates applicable to their branch of service. Each service member with dependents must meet certain requirements as directed by the OSD. These requirements certify the status of those dependents for BAH purposes. The OSD is also responsible for establishing BAH rates for each MHA by determining the costs of adequate housing.

### **B. NATIONAL DEFENSE AUTHORIZATION ACT FY2000, S.1059 SEC 603**

The NDAA 00 is an effort by the DOD to increase retention and recruiting among the services. This effort created a 'triad' of personnel compensation measures which included a 4.8 percent pay increase, pay table reform and a change in the retirement system. In Section 603, a special change occurred which specified an increase in authorized personnel funding. This allowed for an increase in BAH for military housing inside the U.S. This increased the additional amount already determined by the OSD under Section 403(b) (3) of title 37, U.S. Code. This law directed OSD to increase BAH funding by \$442.5 million in 2000, decreasing out-of-pocket (OOP) expenses by 3 percent, decreasing to zero by 2005. The enactment of this legislation was also implemented market-based BAH rates.

### **C. OMB CIRCULAR NO. A-11**

The OMB Circular is a set of instruction/information in the form of a memorandum that issues instructions on how to prepare, submit and execute the President's Budget (PB), to include the exhibits required for BAH. The information in the memorandum is usually current or effective for at least two years; however, the circular is fully revised annually and usually issued in the fall timeframe. The following are a list of topics covered in different OMB circulars: budget, state and local governments, educational and non-profit institutions, federal procurement, federal financial management, federal information resources /data collection, and other special purpose. (OMB, 2004) The Circular is important because it applies to all executive departments and establishments, including DOD. Each part of the Circular indicates the responsibilities of each department and agency involved in the budget process. It specifies all policies and reporting requirements in detail along with any required timeframes, and provides terms and concepts associated with the budget formulation process.

### **D. DOD FINANCIAL MANAGEMENT REGULATION, VOL. 7A CH. 26**

The DODFMR Volume 7A, chapter 26 provides regulations and provisions on BAH. This regulation serves as a guide to finance and disbursing officers for all of the military services, providing budget execution instructions to include BAH. It covers a wide array of issues and is constantly updated.

This regulation specifies general provisions, such as determining dependency status and any special provisions for each of the four branches of service. It covers special situations such as fraudulent claims and military member's responsibility for their assignment and termination of government quarters. Additionally, the establishment of BAH rates, quarters to surviving dependents and the advance payment of housing allowances are also discussed.

Members without dependents and the detail of their entitlements are also covered. The DODFMR specifies the rules for determining relationship and dependency status. Also, limitations on the amount of BAH payable to a members in special situations are included.

## **E. PRIMER ON BASIC ALLOWANCE FOR HOUSING**

The BAH primer (DODBAH, 2002) explains how BAH rates are determined and covers issues relating to feedback received from service members and housing office professionals. Additionally, the primer covers the purpose of BAH, data collection process, local input in the data collection process and rate computations.

The purpose of BAH is to provide fair housing allowances and help members cover the costs of housing in the private sector. Members receive BAH when government quarters are not available. The DOD determines the amount of housing allowance which should enable military members to afford suitable rental housing within a reasonable distance of their duty location. The amount of the allowance is based on the military member's geographic duty location, pay grade, and dependent status.

The DOD uses survey and market information collected from government housing offices. This information is based on the market rental prices. This new method intends to provide more accurate housing allowances by ensuring a better correlation between allowance payments and rental prices.

Prior to 2005, out-of-pocket (OOP) cost for military members were as high as 22 percent before the current method of reporting housing information. However, the DOD has eliminated OOP in the current calendar year. Included in the elimination of out of pocket cost is a rate protection plan that operates on two levels. One form of protection occurs on the individual level and the other form occurs on the geographical level.

When computing BAH, local information concerning the price of the following factors are used in the computation process: rental housing, utilities (including electricity, gas, oil, water, & sewer) and renter's insurance. Runzheimers International (a contractor) collects this data annually from approximately 400 Military Housing Areas (MHAs) in the United States, including Alaska and Hawaii. Each MHA is segregated by sets of ZIP (Zone Improvement Plan) codes.

The data collection occurs in the spring and summer when housing markets are most active. Rental costs are collected on apartments, townhouses/duplexes, and single-family rental units of varying bedroom sizes.

To ensure reliability and accuracy in the reporting of housing costs, the DOD uses data from multiple sources to provide a "checks and balances" approach. Current residential vacancies from local newspapers, real estate rental listings and information from local apartment and real estate management companies are used in the rental pricing process.

Contacts are made with local utility providers. Information from the providers are collected and used to calculate average monthly expenses. The information includes relevant data such, as sensitivity to climate and differences in temperature associated with the different seasons. The renter's insurance portion of BAH covers the value of household contents which are correlated with selected incomes and dwelling types.

Next, information is obtained from Military Housing Offices (MHOs) on suitable housing and unacceptable areas. An income screening process is used to identify appropriate neighborhoods. Another quality assurance step consists of DOD and the Service's on-site evaluations at selected locations. These reviews confirm the reliability and accuracy of the rental data. During these visits, the criteria is evaluated for screening neighborhoods and areas.

Once the screening process is complete, housing profiles and standards are established for each paygrade. The local median housing cost of that standard profile is the local median housing cost associated with that particular paygrade. Once the housing profiles and standards are established, the DOD and each service conduct the following actions:

- Determine the national median housing costs for each profile or anchor point
- Review the local median housing costs for each MHA
- Appraise MHA and profile-specific utility and renter's insurance data
- Prescribe BAH rates based on data input and DoD housing standards policy

Once these actions are complete, the BAH rates are calculated by:

- Determining the total housing costs for each MHA for all the anchor points
- Subtracting the national median out-of-pocket expense from each anchor point in each MHA
- Calculating (using the Housing Standards table above) a separate BAH rate for

each of twenty-seven distinct pay grades that correspond to military ranks for members with and without dependents.

#### **F. NINTH QUADRENNIAL REVIEW OF MILITARY COMPENSATION**

Under the provisions of section 1008(b), title 37, USC, every 4 years the President must direct a complete review of the principles and concepts of the compensation system for the members of the uniformed services. The Ninth Quadrennial Review of Military Compensation (QRMC) (DOD, 2000), conducted during 2000, fulfills this requirement. Regular Military Compensation (RMC) is the focal point for the QRMC. RMC consists of basic pay, BAH, Basic Allowance for Subsistence (BAS) and the tax advantage from tax exempt allowances. The RMC is a tool used in comparing the compensation of service members' to those of civilian employees.

BAH constitutes roughly 20 percent of RMC for enlisted personnel and 17 percent for officers. The purpose of BAH is to cover the cost of housing for service members who utilize civilian housing unavailable if military housing is. BAH rates are set according to the median cost of housing by geographical location and vary with marital status and pay grade.

The DOD's elimination of out-of-pocket (OOP) expenses represents an increase in RMC; however, the 9<sup>th</sup> Quadrennial Review of Military Compensation (QRMC) suggests that military compensation is still falling behind. The review revealed a need to adjust the current military pay tables because they do not reflect the true educational attainment of the current service members. If the current pay tables are adjusted, then the military will become more competitive with the salaries in the civilian sector and meet the needs of a more educated and technically skilled workforce.

#### **G. MILITARY RECRUITING AND RETENTION AFTER THE FY2000 MILITARY PAY LEGISLATION**

This RAND study (Asch, Hosek, Arkes, Fair, Sharp, Totten, 2002) analyzed the FY00 National Defense Authorization Act (NDAA 00). The military faced problems with recruiting and retention since the inception of the all-volunteer force in 1973. The problems included difficulty in the services retaining experienced personnel. To respond to these problems, Congress passed the FY00 NDAA which raised military pay and allowances, to include BAH. Despite the problems associated with a weak economy, the



pay and allowance increases appeared to have a positive effect on retention and recruiting.

#### **H. MILITARY HOUSING FURTHER IMPROVEMENTS NEEDED IN REQUIREMENTS DETERMINATIONS AND PROGRAM REVIEW**

This 2004 Government Accountability Office (GAO) report examined the DOD's effort to provide adequate and affordable to service members. This report compared differences in paying housing allowances and providing government or leased housing to service members.

The report highlighted the DOD plans from FY04 to spend \$9.8 billion for housing for approximately 711,000 families of active duty military personnel. The GAO examined the effectiveness of the DOD's policy of relying on housing within the local communities and privatized military housing to satisfy housing requirements.

One important finding from the analysis was related to the DOD's policy of relying on local community housing to meet military family housing needs. Of all of the methods, it appears to be the most cost-effective. For FY04, DOD's estimated housing costs for a typical military family was about \$13,600 for local community housing, \$16,700 for privatized military housing, and \$19,000 for military-owned housing.

The study also found that DOD's revised housing requirements determination process does not provide consistent and reliable estimates of military installation housing needs. This was due to the fact that the process did not require the services to maximize reliance on local community housing.

Additional findings consisted of the DOD's lack of detailed guidance to the services on performing housing requirements assessments. This finding believes to have resulted in the services using inconsistent methodologies, questionable assumptions, and outdated information in performing assessments. The report explored the lack of information pertaining to service members' housing preferences due to the recent increases in BAH.

The GAO made several recommendations which included surveying service members to determine the effects of BAH increases on their housing preferences and the application of consistent reviews for housing construction and privatization proposals.

**I. HIGHER MILITARY PERSONNEL ALLOWANCES SHOULD INCREASE USE OF CIVILIAN HOUSING, BUT NOT RETENTION**

This 1999 GAO report (GAO, 2001) analyzed the DOD's effort to improve the quality of life by increasing BAH for military personnel. The report focused on a survey of over 66,000 military members' view of military housing and allowances.

The study discusses DOD's effort to provide military housing by either providing BAH or assigning military and leased housing. According to the survey, 72 percent of military personnel preferred civilian housing over military housing if their costs were equal. Of the personnel surveyed, 57 percent were dissatisfied with their housing allowance.

The primary reason service members live in military housing is related to the lack of having to pay utilities which can be associated with civilian housing. Other benefits such as security and family support were the second reason why service members preferred military housing.

The GAO findings asserted that the DOD cannot expect any substantial increase in retention as a result of increasing BAH. An additional finding concluded that housing and housing allowances were less than one percent of those surveyed as reasons for leaving the military.

However, the report mentioned the DOD's non-concurrence with the notation that improvements to housing allowances would not have a positive effect on retention. The DOD indicated that a ten percent increase in the housing allowance would yield only a three percent increase in overall retention within that target group.

**J. PORTFOLIO ANALYSIS & FINANCE METHODS U.S. NAVY HOUSING (MEDVED, 2000)**

Direct funding allocations for military housing have been cut in half. To determine the benefits of building new military housing or whether to outsource the initiative to private contractors, the Navy uses decision support tools to analyze the factors associated with these decisions. Some of these decision support tools consist of basic software applications that evaluate the decisions associated with government procurement and finance. These tools have become an important part of the planning process since housing construction expenditures in the U.S. are close to \$500 billion and

Defense appropriations as a percent of the federal budget were cut from 50% in 1960 to 15% in 2000.

It is important to remember the usefulness and efficiency of utilizing decision support software in comparing alternatives to determine optimal solutions. This has become evident since the funding for DOD programs continues to decline. It is necessary to constantly seek efficient alternative technologies that serve to meet any funding deficiencies.

#### **K. CASH COMPENSATION FOR ACTIVE-DUTY MILITARY PERSONNEL**

This report presents an overview of military compensation for active-duty officers and enlisted personnel in 1999 (Asch, Hosek & Martin, 2002) this report analyzed military compensation and compared its results to civilian pay compensation. The importance of this study proves BAH to be an important factor in the compensation of military personnel due to their role as stakeholders in the BAH process.

This study utilized three major sources of data. The first source relied on data from the (JUMPS) Joint Uniform Military Pay System file for each month within the calendar year of 1999. The second source, Personnel Tempo (PERSTEMPO) data, was provided by the (DMDC) Defense Manpower Data Center. Personnel Tempo data includes data pertaining to military member's characteristics such as occupation, service and military entry date. Lastly, information was provided from the OSD, Directorate of Compensation, consisting of the average amount of BAH, Basic Allowance for Subsistence (BAS) and federal tax advantage for 1999 by paygrade, year of service, and marital status.

The first objective of this study was to estimate Regular Military Compensation (RMC). "The traditional definition of cash pay is RMC, which is the sum of BAH, BAS and the tax advantage." (Asch, Hosek & Martin, 2002) The study took the compiled data and listed RMC per officer and enlisted. The RMC was separated into total expenditure amounts for BAH, BAS and the tax advantage.

From the compiled data, BAH expenditures accounted for \$6,497 of the \$30,509 (approximately 21.2%) for enlisted personnel. For officers, BAH expenditures accounted for \$10,584 (approximately 17.15%) of the \$61,689. (Asch, Hosek & Martin, 2002)

However, if you add the tax advantage associated with the BAH allowance, these percentages increase to 23% and 22.5%, respectively.

While this study focused primarily on the compensation differences between the military services and the civilian sector, my intent is to use its data to support the importance of BAH by displaying it as a percentage of overall compensation of military personnel.

#### **L. WHY MILITARY FAMILIES LIVE IN ON-BASE HOUSING**

Family housing provides members of the military significant benefit. It is an expensive one-costing about \$10 billion annually-and will likely become even more so as aging sets of quarters are renovated or replaced at an estimated cost of \$20 billion. (RAND, 1999)

The 1999 RAND study examined the cost and benefits of on-base housing in comparison to off-base housing. It examined research conducted by the National Defense Research Institute (NDRI), which focused on housing options for military members. The NDRI research results concluded that:

1. Service members choose to live on-base primarily for economic reasons.
2. The preference for on-base housing is driven by the perceived gap between the local market value of government housing and the allowance provided for those who occupy civilian quarters.
3. While service members consider the traditional benefits of military housing (e.g., support, cohesiveness) useful to families in general, they do not regard them as decisive in choosing whether to live on or off base.
4. Fewer military families than civilian families own homes; when renting, both spend about the same proportion of their salaries on housing.

The study proposed the hypothesis that suggests service members view military housing as a ‘substantial economic benefit’ which explains why most installations have long waiting lists (in some case up to two years) for housing.

The study utilized survey and census data. It confirmed the validity of past results, which concluded that military members chose to live on-base for economic reasons and their preference to live on-base reflected the gap between the local market

value of government housing and the allowance for those who occupy civilian quarters. The family support among families living in government quarters was not important in the decision of military members. Fewer military members than civilian families own homes and they spend about the same amount of their salary on housing.

The study determined that off-base housing would be more beneficial to the government and to military members alike, and provided two recommendations. First, BAH should be raised so that members not living in government quarters receive the same benefit as those living in government quarters. Differences can be traced to the out of pocket expenses, such as utilities, that government occupants don't have to pay. Second, DOD should charge government quarter occupants for their utilities and use the profit to increase the housing allowance for members living in off-base quarters.

#### **M. AN EVALUATION OF HOUSING OPTIONS FOR MILITARY MEMBERS**

“This study complements previous efforts by investigating the preferences of military families for different kinds of housing, the methods they used to find housing at new locations, and the factors that are important in their choice of housing.” (Buddin, Gresenz, Hosek, Elliott, Hawes-Dawson, 1999)

The report took data from two primary sources. The first source surveyed 4,400 military members from 12 different military bases and the other source included the 1990 U.S. Census. The report also drew on previous studies, (CBO, 1993) that concluded that military housing is far more expensive than civilian housing. Due to the government's lack of profit incentive, it is a relatively inefficient producer of housing compared to the private sector. Overseas housing policies were not included in any of the studies.

The report had three important findings. First, the report found that military members viewed on-base housing as a greater economic benefit than off-base housing. The second finding reported that there is a benefit gap in value between military housing and the allowance for off-base housing. The gap is the widest amongst the junior enlisted ranks and slowly closes at the senior officer ranks. Among E5s and E6s, the mean difference is 26 percent, while it is only 3% for junior officers. There appears to be no difference for senior rank officers, creating high demand in lower ranks for military housing. The third finding reports that most military members do not view the traditional

benefits of living on-base, such as acculturation and family support, as important factors in the decision to live on base.

The report concluded that the government would benefit from raising the housing allowances and reducing military base housing. The report suggested two initiatives that would help make the adjustment to eliminate the gap. First, make military housing and civilian housing more equivalent for the junior enlisted where the benefit gap seems to be the widest. Create programs to help those military members find off base housing and charge for on-base benefits. Second, enhance programs that assist members in finding civilian housing.

#### **N. MILITARY HOUSING PRIVATIZATION INITIATIVE**

The NDAA 96, Public Law 104-106 110 Stat 186 Section 2801, allowed the DOD to work with firms in the private sector to build and renovate military housing. This led to the development of the Military Housing Privatization Initiative (MHPI). The purpose of the MHPI is to allow the DOD to provide quality housing to service members. This is believed to help increase the retention of quality personnel within the all-volunteer military force.

During 2001, the DOD owned and maintained 197,671 housing units worldwide. It was estimated that half these units were inadequate and about 33 percent of the occupied units were an average of 30 years old. This became a major issue for the DOD since they determined that retention rates among personnel living in high quality housing were about 15 percent higher than for those living in low quality housing. (DODMHP, 2004)

Currently, OSD maintains a goal of revitalizing, replacing or demolishing all inadequate housing by 2007 using MILCON and privatization funds. MHPI is proving to be a useful tool that will help achieve this goal. It offers quality and affordable housing using private-sector expertise and capital.

BAH plays an important role in the MHPI. It provides a steady stream of income needed to support the initial and long-term financial viability of housing projects. The recent increases in BAH should help stimulate more and better quality privatization projects by making the privatization deals more economically attractive to private

contractors. This should increase the competition among the private contractors competing for MHPI contracts and lead to greater leveraging of housing for the DOD. If these goals are met, then MHPI will result in better quality housing for military service members and their families.

**O. THE PRESIDENT'S MANAGEMENT AGENDA-PRIVATIZATION OF MILITARY HOUSING DEPARTMENT OF DEFENSE FY02 (BUSH, 2001)**

Due to current issues surrounding the poor state of military housing and the large amounts of government funding needed to mend these problems, the President's Management Agenda (PMA) has developed some initiatives to quickly address these issues. Initiatives have four major components, as follows:

- increased reliance on public-private partnerships
- increased funding for housing construction and public-private partnerships
- increased funding for housing allowances to eliminate out-of-pocket expenses by service members
- increased reliance on private-sector housing as the primary source of housing

An important part of the PMA included the commitment to reduce the OOP to zero by 2005 for military families living in civilian housing. This is intends to enable military families to leave inadequate military housing and rent quality housing in the civilian sector.

The PMA directs that the DOD continues to use public-private partnerships to privatize housing at its current rate; the DOD should be able to eliminate all inadequate military family housing units by 2008.

**P. SUMMARY**

I have examined current legislation surrounding the BAH entitlement. I also provided the BAH definition as listed in DOD regulations that describe the terms and conditions of its payment. In the BAH primer, I explained how housing information is collected and used in the process to calculate the entitlement. Additionally, I summarized studies and research that described current issues and problems surrounding this entitlement. These studies highlight a few conflicts surrounding the influence of BAH on retention through the increase of compensation. This issue will be investigated further in this thesis.

To understand the issues surrounding this debate, I will evaluate the stakeholders and understand their involvement. The majority of stakeholders are involved in the budget process. Additionally, the next chapter will examine the Fiscal Year Defense Program (FYDP) budget and how it influences decisions that surround the BAH entitlement.



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### **III. DEFENSE BUDGET PROCESS AND STAKEHOLDER REVIEW**

To understand the planning that goes into estimating annual BAH expenditures, it is important to understand the nature of the defense budget process. In this chapter, I will focus on the roles and responsibilities of each stakeholder involved in the decision making process. This chapter will also highlight the complex environment that surrounds resourcing the BAH entitlement, beginning with the Defense Budget process and concluding with a review of each stakeholder from the resource allocation perspective.

#### **A. DEFENSE BUDGET PROCESS**

##### **1. Preparation**

The annual Defense Budget process begins with the preparation of budget requests by the President, DOD, and executive branch agencies. The President provides DOD with fiscal preparation guidance on the budget requests approximately twenty months prior to the start of the fiscal year. The Office of Management and Budget (OMB) reviews this guidance. OMB is ultimately responsible for the preparation, coordination and administration process for the overall budget process. During the review, OMB changes parts of the guidance if needed. After a thorough review by OSD and OMB, the defense budget request is submitted as part of the President's Budget (PB) to Congress during the February timeframe. This occurs approximately nine months prior to its execution.

##### **2. Review**

The next step of the Defense Budget process occurs when Congress reviews the President's defense budget request. During the review, Congress changes parts of the request, if needed, to meet fiscal and political constraints. House and Senate appropriations committees are responsible for approving the PB, to include the Defense Budget request. Next, I will cover this process in more detail.

##### **3. Congressional Budget Resolution (CBR)**

CBR establishes spending caps on functions within the Federal Budget, to include the National Defense Budget Function (051). Each year Congress passes the CBR as fiscal guidance for congressional committees. Any actions associated with this guidance

must be complete by April 15th. Both the House and Senate approve the CBR; however, the President's approval is not required. CBR outlines budget goals by implementing 13 annual appropriations bills (discretionary spending) and changes laws that govern mandatory spending. Both the House and Senate budget committees develop their own version of CBR. Later, the two budget committees meet to resolve any differences between the CBRs.

#### **4. Defense Authorization**

Concurrent with the PB review, Congress also reviews DOD existing programs and requested new program initiatives ('new starts'). This review, known as the authorization process, is of critical importance to DOD and its BAH program. According to Major Edwards, MPMC Budget Officer at M&RA, 'The authorization process is the primary means by which Congress ensures that DoD is executing the programs in the manner it believes best serves the public interest. Since funding can be appropriated only to authorized programs, the authorization process provides the 'check and balance' necessary to ensure that DOD is supported as intended by Congress. The fact that DOD is supported (or constrained, depending on one's point of view) by Congress is an important factor when evaluating programs like BAH. DOD is continually engaged with congressional staffers and members, providing data and responses to questions about how the BAH program is working. Congress is more likely to favorably consider fully supporting programs that are working effectively and are perceived as good investments by the taxpayers.' (Edwards, 2005)

According to Edwards, once the National Defense Authorization Act (NDAA) is passed and signed into law, the services can continue approved programs and implement 'new starts'. A key difference between the NDAA and the PB is that the NDAA does NOT provide budget authority. The NDAA does provide fiscal limits and other constraints that directly impact on DoD programs. Congress attempts to 'reconcile' the NDAA with the PB to minimize unfunded mandates, or areas where PB does not adequately support programs authorized in the NDAA. In recent years, the NDAA has authorized significant increases to Manpower that have not been included in PB. For example, the Marine Corps was authorized in FY05 NDAA to increase its end strength by 3,000 Marines from 175,000 to 178,000. The PB appropriated funding for only

175,000. This mismatch between requirement (NDAA) and available funds (PB) requires that the services find money through other sources. Since the BAH funding requirement is directly related to the number of active duty Marines, this discrepancy will magnify the impact of the BAH rate timing with the Planning, Programming, Budgeting and Execution (PPBE) process discussed below. (Edwards, 2005)

The NDAA also impacts BAH in other areas; for example, changes made to compensation surrounding the BAH entitlement. Beginning with FY96 NDAA, this legislative change substantially increased the compensation for service members. A few years later, the FY00 NDAA established legislation which reduced service members OOP to zero in the BAH entitlement. As BAH continues to be an important topic, I will expect to see future legislative changes with the NDAA surrounding this entitlement.

## **5. Defense Appropriations**

As discussed above, the defense authorization bill (NDAA) provides authority for Congress to appropriate funding for defense related programs; however, it does not provide the funding. The three national defense appropriations subcommittees decide the detailed funding allocations for DOD, Military Construction (MILCON), and Installations. After each subcommittee approves their appropriation bill, the entire appropriation committee must agree on that bill.

The House begins the appropriations process. After the House approves each appropriations bill, it is sent to the Senate. The Senate may change each bill based on guidance from its subcommittees. Later, the entire Senate must approve the final product. Any differences in the House and Senate bill are resolved through a voting process, which is approved by the entire House and Senate. The outcome is consolidated into a report, which is sent to the President for signature.

## **6. National Defense Components**

The National Defense Budget Function consists of the following components: DOD (051), defense portion of Department of Energy (053) and other defense related federal agencies (054). The DOD's budget is separated into the following elements:

- Procurement
- Shipbuilding and Conversion (SCN)
- Operation and Maintenance (O&M)

- Military Personnel (MILPERS)
- Military Construction (MILCON)
- Defense Working Capital Fund (DWCF)
- Research, Development, Test and Evaluation (RDT&E)

## **7. Summary**

The DOD budget process begins when the President submits his annual budget request in February, a year prior to execution. Congress then approves a budget resolution, which sets limits on the amount of spending in discretionary programs. Additionally, Congress instructs committees to make changes in tax or entitlement legislation if needed. House and Senate congressional authorization and appropriation committees implement these changes. Disputes are settled with negotiations between the two committees and a final bill is sent to the president for his signature.

Pay and allowances for our nation's military, including BAH, are highly politicized. Service chiefs, such as the Commandant of the Marine Corps, testify before Congress annually to request adequate funds to support entitlements like BAH. During a 2002 Senate Armed Services Committee Confirmation Hearing, the Commandant of the Marine Corps stated "We are achieving significant progress in improving family housing through a combination of Basic Allowance for Housing (BAH) increases, which will result in a zero out of pocket BAH payment by 2005 as currently budgeted." (SASCCH, 2002) His comment highlights one of the significant changes that were established through the initiation of the NDAA 00.

Now that I have explained the role of the President, Congress and the Armed Forces Service Committees in the budget, I will explain the responsibilities of the DOD, OSD, OMB and the services. But first it is important that I explain the process that the services use to estimate and execute their budgets. The entire defense budget process evolves around the Planning, Programming, Budgeting and Execution (PPBE) process. This complex process is a method for all stakeholders to have inputs into the DOD resourcing process. The next section of this chapter summarizes the PPBE process.

## **B. PLANNING, PROGRAMMING, BUDGETING AND EXECUTION (PPBE)**

### **1. Planning**

The Planning process is the first step of PPBE. This process analyzes threats to national security and develops plans to address these threats. The Planning process occurs approximately sixteen months prior to the start of a fiscal year for which the budget authority is executed. The Planning process is guided by the National Security Council (NSC), which addresses issues concerning national security and foreign policy matters.

The NSC prepares the National Security Strategy (NSS), which outlines the defensive strategy. The NSS guides the Joint Chiefs of Staff (JCS) who establish the National Military Strategy (NMS). This strategy addresses military objectives and provides a risk assessment of defense programs. From this assessment, combatant commanders provide the Secretary of Defense and JCS with an Integrated Priority List (IPL), which consist of high priority needs. The NMS and the Joint Planning Document (JPD) guides this process.

From the combatant commander's assessment, the Strategic Planning Guidance (SPG) is developed. It provides guidance to each of the services on the Program Objectives Memorandum (POM) submission. Additionally, the SPG guides the OSD and JCS in a joint effort to examine major defense issues and performance matrices. From the results of this examination, the OSD issues the Joint Programming Guidance (JPG). This is the final output of the planning process. It contains fiscally constrained programmatic guidance that is used in the Programming process.

### **2. Programming**

The programming process begins by converting planning decisions, programming guidance and congressional guidance objectives into a detailed allocation of resources. Each service and defense agency determines their requirements and compares it to the available resources. Based on the differences between the available and required resources, each service submits a proposal to acquire any needed resources. These resources are acquired in the form of a program.

The services use the POM to submit their programming proposals. POMs are used to establish Future Years Defense Programs (FYDP). It establishes the funding levels four years in advance for cost and Manpower and seven years for the budget of forces. During FY03, the Deputy Secretary of Defense approved Management Initiative Decision (MID) 913, implementing a 2-Year Planning, Programming, Budgeting, and Execution (PPBE) process. MID 913 states that the DOD will evolve from an annual program and budget cycle to a biennial (2-year) cycle starting with an abbreviated review and amendment cycle for FY2005. The DOD will formulate 2-year budgets and use the off-years (odd numbered years) to focus on budget execution and program performance. A combined program and budget review will continue. The 2-year cycle will guide the DOD's strategy development, identification of needs for military capabilities, program planning, resource estimation and allocation, acquisition, and other decision processes. This change will more closely align DOD's internal cycle with external requirements in statute and administration policy. Whenever there is a need to address urgent issues during the off-years, a Program Change Proposal is submitted. PCPs make changes to the baseline budget established in the POM during the on-years. An increase in spending for programs must be offset by a decrease in spending from other programs.

Concurrently, the POM and PCP are analyzed by OSD and JCS review teams. Whatever issues arise during this review is addressed in the Program Decision Memorandum (PDM). Once the Secretary of Defense signs the PDM, a separate PDM is issued for each service. The PDM is the primary output of the Programming process.

### **3. Budgeting**

The Budgeting process provides the formulation and justification of the budget. It serves as a detailed review of program's pricing, phasing, and ability to execute within the constraints of the budget. Each service uses a Budget Estimation Submission (BES) to submit their budgets during the on-years. BES receives guidance from the POM. Budget Change Proposal (BCP) is used during the off-years instead of the BES. It is used to address urgent issues between the POM years. The BCP is similar to PCP in that any changes to the baseline must be offset by a decrease in funding from other programs.

After the submission of BES or BCP, OMB and OSD review the budget changes. During the review, interest is focused on pricing, reasonableness, and ability to execute

the budget. The results from this review become the Program Budget Decision (PBD) document. PBDs allow the OSD and OMB the opportunity to modify the BES. PBDs generally result in ‘cuts’ to programs, to free up funds to pay for programs within DOD. The final output of PPBE is the submission of the DOD budget to Congress as part of the PB.

#### **4. Budget Execution**

The budget execution process begins with the President’s signature on the appropriations bill. This is followed by the apportionment process and the issuance of Treasury Warrants, which begins the flow of budget authority to DOD. Once the President’s Budget is enacted, funds are allocated via the Treasury to OSD. OSD then allocates funds to the services, providing budget authority (BA) to obligate appropriated funds.

Concurrently, the Office of the Under Secretary of Defense, Comptroller (OUSD, C) along with Program Analysis and Evaluation (DPA&E) reviews program performance-using matrices that were established during the Programming and Budgeting process. The results from this review determine the future of programs within the defense budget. Programs are usually adjusted or replaced in order to meet emerging demands.

#### **5. Defense Budget Summary**

The Defense Budget process, as a component of PPBE, plays a key role in resourcing the DoD BAH program. As stated earlier in this thesis, if BAH program funding levels are not accurately determined, it is very difficult to ‘fix’ program shortfalls during the year of execution. Program shortfalls typically result in funds being transferred or reprogrammed to pay the bill. Next, I will provide an overview of key BAH program stakeholders. Since the ultimate objective of this thesis is to provide recommendations that will preclude this situation, a thorough examination of all key factors in the BAH program is required.



## **C. STAKEHOLDER REVIEW**

### **1. OSD**

Within the FYDP, the OSD (specifically OUSD Personnel & Readiness, Military Personnel Policy, and Compensation) is the stakeholder with the most influence. It has total control over the entire program, including BAH. As discussed earlier in this chapter, OSD's responsibility is to allocate resources to the services. In addition to its role in resourcing BAH, it also provides significant input to Congress and the services regarding policies that impact on the BAH entitlement. "OSD is responsible for the policies concerning all aspects of the BAH rate setting process. In addition, the BAH Program Manager is a member of the OSD staff and works with the individual Services to create and revise BAH Policy." (Fowlkes, personal communication, March 7, 2005)

For example, OSD has been instrumental in pursuing cost-effective alternatives to housing, such as Public-Private Venture (PPV) housing. This program has proved to be a prompt and successful solution to the problem of substandard housing quality and lack of available housing. "I think that PPV and all of the privatization efforts among the Services have made huge strides in helping the Department reduce the number of substandard housing units in the US. It has helped us to get better housing for many members living on base and in the local communities. I cannot predict the long term success of the program, however, given the situation we faced five years ago (many more substandard units and decreasing budgets with which to address that problem), I don't see how anyone could view the program as less than successful." (Fowlkes, personal communication, March 7, 2005)

Additionally, OSD continually evaluates the effectiveness of military compensation, including the BAH rates. The current BAH process is a result of this effort. "I believe that the Basic Allowance for Housing is an accurate, fair program that provides an allowance for members to obtain housing in their local area of assignment which is equal to housing typically obtained by their civilian counterparts of equivalent income. The program represents an improvement over the previous, spending-based program." (Fowlkes, personal communication, March 7, 2005) Fowlkes adds, "As service member's housing allowances have increased an average of 41 percent over the last five years, the retention rate among high quality personnel will surely increase as a

result. This example proves the determination of the DOD in its effort to achieve its goal of recruiting and retaining high quality personnel.” (Fowlkes, 2005)

## **2. Manpower And Reserve Affairs (MR&A)**

Manpower Reserve and Affairs (M&RA) is the next major stakeholder. Its mission is to assist the Commandant by planning, directing, coordinating, and supervising both Manpower issues relating to active and reserve forces. According to the current Deputy Commandant for Manpower and Reserve Affairs, Lieutenant General Henry Osman, ‘the Commandant commands the Marine Corps through M&RA.’ (Edwards, 2005).

The Manpower Plans and Policy Division (MP) is the section within M&RA that is responsible for formulating Manpower plans. MP Division formulates Manpower plans by first determining total Manpower needs, then preparing plans, policies, programs, and instructions. Their mission is to implement the Commandant's policies and decisions on Manpower issues. The Programs and Budget section (MPP40) within MP is where the Manpower plans are analyzed and then forwarded to the Military Personnel Branch (RFM), Programs and Resources Department (P&R). Upon receipt, RFM uses the information to formulate budget estimates. Additionally, BAH policy issues are coordinated within MP Division. Major Christina McCloskey, from the MP Division Policy Section (MPO-40), confirms this with her response, “I advise on compensation issues from the policy perspective.” (Maj McCloskey, personal communication, March 11, 2005) Together, MPP40 and MPO40 work closely to ensure that RFM is aware of potential end strength or BAH policy changes that may result in manpower cost changes.

## **3. Programs and Resources (P&R)**

P&R’s mission is to develop and implement Marine Corps financial requirements, policies, and programs. P&R is responsible for managing the PPBE process for the Marine Corps and is responsible for coordination and liaison with the Navy for funding Marine programs. The interaction between M&RA and P&R occurs within the Military Personnel Branch (RFM) of the Fiscal Division and Program Development Branch (RPD). RFM is responsible for analysis, formulation, justification, presentation, and execution of the MPMC (Military Personnel Marine Corps) and RPMC (Reserve-

MPMC). RFM is also responsible for the Marine Corps' portion of the Operation and Maintenance (O&M) budget and Navy directed appropriations. RPD's mission is to optimize allocation of limited financial resources in support of Marine Corps programs by supervising the Marine Corps Program Objective Memorandum (POM) development. It is responsible for coordinating and submitting the USMC POM within the Department of the Navy (DON). RPD is commonly known as the fiscal planner/programmer while RFM is known as the manager of budget execution (or 'manpower checkbook').

LtCol Gallant (RFM) provided the following information concerning the process that P&R uses to estimate Marine Corps BAH expenditures. P&R (RFM) receives Manpower plans from M&RA. These Manpower plans provide P&R (RFM) with dependency status of Marines by percentages according to rank. Additionally, personnel in receipt of overseas housing allowance (OHA) along with BAH are included in the plans. P&R (RFM) costing models consider the total population of Marines, by rank, and then applies the percentage to obtain the number of Marines potentially drawing BAH with dependents. The Marines that are living in adequate government quarters are subtracted from the totals. This number is reviewed during the NAVCOMPT budget cycle. P&R (RFM) then reviews and analyzes the Marine Corps Total Force System (MCTFS) - derived adequate government quarters report which provides the number of Marines by rank and the number of Marines living in military housing. I&L provides P&R (RFM) by rank, the number of Marines who are moving out of adequate government quarters and into PPV. This number is used to reduce the number of Marines in adequate government quarters accordingly. The remainder becomes the BAH without dependents (either BAH without, BAH partial, or BAH Diff (BAH Diff goes away in FY06)). This is the weakest part of my costing. I do not get a plan for the different types of BAH withouts and rely on historical data only. (LtCol Gallant, personnel communications, March 11, 2005)

Thus, RFM uses numerous input to determine requirements for BAH. "Each BAH stakeholder must work closely with RFM to ensure that manpower, policy, and housing program changes are identified early in the PPBE cycle –this ensures that resource requirements are known and can be provided to senior leadership when appropriate" (Edwards, 2005)

#### **4. Installation and Logistics (I&L)**

Installation and Logistics (I&L) Division coordinates and manages family housing and Public Privatized Ventures (PPV). For the purpose of this thesis, I will focus on the Installations section of I&L, since their responsibility concerns family housing and BAH. “On the Installations side, I&L plans, programs and budgets for real property services, facility sustainment and recapitalization (restoration/modernization), construction of new footprint, demolition/divestiture of excess facility capacity including BRAC, and environmental services.” (Barszewski, personal communication, March 7, 2005)

It is important to note I&L’s responsibility with regard to the management of PPV. They are responsible for transferring Family Housing to private civilian contractors. I&L analyzes the feasibility of contracts with PPV contractors and the outcomes provided from the transfer. They measure the return of these investments by examining what the private contractors provide in terms of quality housing and operations. “When military housing is turned over to the responsibility of PPV contractors and adequate homes are privatized, we purchase the long-term efficient operation, management, maintenance, and recapitalization of the property. When inadequate homes are privatized, we purchase the initial renovation or replacement of those homes, along with the long-term operation, management, maintenance, and recapitalization.” (Barszewski, personal communication, March 7, 2005)

It is important to note that since family housing and its operations are part of the MILCON appropriation, once privatized, MILCON funding is no longer required for family housing expenditures. As a result, the money previously programmed for family housing becomes part of the Manpower account to address BAH requirements. I&L sends information to P&R (RFM) on family housing which is placed under the authority of PPVs. “I&L coordinates with Manpower and P&R to effect transfers, during the POM process, from the Family Housing O&M accounts to the Manpower accounts associated with the housing being privatized.” (Barszewski, personal communication, March 7, 2005) Additionally, I&L provides Manpower with projections for additional BAH funding requirements. “I&L coordinates with Manpower and P&R to initiate POM issues and initiatives for funding shortfalls in the BAH account when the additional BAH

requirement exceeds the FHOPS (Family Housing Operations) funding transferred to Manpower in the POM process.” (Barszewski, personal communication, March 7, 2005)

I&L is an important stakeholder in the BAH process. This is due mostly to its relationship with the PPV and the management of family housing. Their ability to accurately and efficiently evaluate and manage family housing has a direct effect on military members.

## **5. Marines & Their Dependents**

Lastly, Marines and their family members are among the important stakeholders in the budget process. Whatever actions and decisions are made by the above the stakeholders directly affect Marines and their dependents. These actions and decisions, as reported in some of the earlier studies, may influence the morale and welfare of Marines. Decisions that have a positive impact benefiting Marines and their families may increase retention and recruiting efforts while the decisions with negative impacts may decrease retention and the number of personnel recruited.

During the FY02 Quality of Life study, there was focus group that included officers wives from all grades. (Decision Engineering Associates, 2002) The focus of the group was to identify aspects of being married to a Marine. Although the group named several positive affects, negative effects included the inequality of BAH. This inequality referred to differences in benefits received by service members living in base housing versus those receiving the BAH entitlement. However, it is important to note that this study occurred in 2002. Since then, BAH increases have ended the OOP expense for service members. As a result, the inequality between base housing and the BAH entitlement has lessened. This should have a positive affect on the satisfaction of Marine Corps officer wives with their husband’s military service. Ultimately, this should increase the retention among Marine Corps officers.

In a different part of the study, a variety of Marine Corps personnel were asked about their housing expenses. The result of the answer to this question is interesting. The question asked participants whether they live in civilian housing and, if so, what percentage of their housing expense is paid from their BAH entitlement. The overwhelming majority of the survey participants were not living in civilian housing.

The other largest group said that BAH covered their mortgage or rent along with a portion of their utilities. The survey results indicated that few participants had housing expenses beyond the amount of their monthly BAH rate. It appears that the true concern among personnel is not the amount of their BAH entitlement but is the fairness of the entitlement when compared to other benefits such as on base housing.

#### **D. CHAPTER SUMMARY**

In this chapter, I covered the Defense Budget process along with the responsibilities of the major stakeholders involved in the process. The budget uses the PPBS process that ensures the proper allocation of resources to all of the service. The process attempts to evaluate the results of the funding in terms of expected benefits. While this process is complex and time consuming, it's outcomes provide combatant commanders with the best mix of forces and equipment within the established fiscal constraints. Each stakeholder plays an important role in the allocation of resources. Whether it is the role of policy maker deciding on changes in appropriation or the role of a service member deciding to continue their service with the military, each role plays an equally important part of the budget process. Now that I covered the fundamentals of the budget process, I will explain the importance of the funding and how it is used to compute service member's housing allowances in the next chapter.

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## **IV. BAH PRICING PROCESS**

### **A. INTRODUCTION**

Each year the Deputy Under Secretary of Defense (OUSD) for Military Personnel Policy (Compensation) and Runzheimer International study housing issues and concerns for DOD. Their intent is to help the DOD provide fair housing allowances to service members. The DOD's policy is to use community resources first to provide housing to military members due to the limited supply of on-base housing. Only 30 percent of eligible military members are able to utilize on base housing due to limited housing supplies. (Runzheimer International, 2004)

### **B. OBJECTIVE**

The objective of the annual housing study is to establish housing standards used to calculate BAH rates. These standards are used to determine the amount of BAH that each military member will rate based upon their paygrade, dependency status and location of duty station. It is important to remember that these standards do not determine what type of housing service members should rent; they are a means for the DOD to compensate service members so they are able to obtain comparable housing to that of the local civilian sector. The study determines housing standards for service members that are comparable to their civilian counterpart's average housing consumption. The average housing consumption is matched by variables that include age, education, and household income.

### **C. STANDARDIZATION**

The first step of the standardization process is to identify comparable compensation by relating military incomes to civilian incomes and by analyzing civilian housing patterns. To determine comparable incomes, DOD uses a tool known as Regular Military Compensation (RMC). RMC consists of basic pay, Basic Allowance for Subsistence (BAS), Basic Allowance for Housing (BAH) and a six percent tax advantage. The six percent tax advantage is the additional income military personnel would have to earn to receive their current take home pay if their allowances were taxable.

The BAH entitlement portion of RMC has standards based on two separate amounts. These amounts differ based on whether or not the service member has



dependents. Service members with dependents receive higher housing compensation compared to service members without dependents. Next, BAH standards are determined for each paygrade based on their equivalent civilian counterpart. The percentage differences in BAH rates are structured to differentiate between the different paygrades. In order for the DOD to ensure that the BAH standards are current and accurate, surveys are conducted annually.

#### **D. SURVEYS**

OSD (P&R) and Runzheimer International work together to continuously compare BAH rates with civilian expenditures to ensure that BAH standards remain equivalent. Each year, DOD and Runzheimer International travel around the continental United States (CONUS) to provide training to housing offices that participate in rental property surveys. These training sessions usually occur in the January and February timeframe. After the training sessions, each Military Housing Office (MHO) collects and submits rental property information to Runzheimer International during the May-July timeframe. (Runzheimer International, 2004)

After the submission of rental information, Runzheimer confirms the validity of the rental amounts by conducting a separate independent survey of additional properties in each Military Housing Area (MHA). The information is consolidated and analyzed. From the analysis, Runzheimer calculates the median cost of adequate housing for six housing profiles in each of the 370 military housing areas (MHA). The following are the six established housing profiles:

- One bedroom apartment
- Two bedroom apartment
- Two bedroom townhouse
- Three bedroom townhouse
- Three bedroom single family dwelling
- Four bedroom single family dwelling

After Runzheimer establishes six housing profiles, they send the information to OSD (P&R). They review the data and ensure its validity. During the review, OSD

(P&R) and a representative from each service review the calculated median total housing costs for accuracy and confirm the median housing cost as accurate. After confirmation, OSD (P&R) relays the information to the Defense Manpower Data Center (DMDC). DMDC analyzes the information by comparing current results to past results while looking for trends. (Runzheimer International, 2004)

#### **E. ANALYSIS**

During the analysis, DMDC computes BAH rates based on factors associated with the differences in trends and median total housing costs. In their evaluations, an expenditure pattern typically will emerge. As people's income increases, whether military or civilian, their housing expenditures increase by approximately the same amount. This pattern makes the DOD's goal of comparable housing standards more difficult to obtain.

During the analysis, there are comparisons made between the average housing consumption of civilians and service members. These comparisons separate categories into different groups by age, educational level, and household income. These comparisons utilize the results of Consumer Expenditure Surveys (CES.) Changes are made to BAH rates based on the differences in standards. As a result, civilian housing expenditures are consistent with the levels and patterns of average BAH rates.

#### **F. PUBLISHED RATES**

The outcome of this analysis becomes the established BAH rates. Once DMDC establishes the BAH rates, they send the information to OSD (P&R). Again, OSD (P&R) reviews the information and sends it to each of the services during the November timeframe. This process establishes the BAH rates for each service. During December, OSD submits BAH rates to finance centers, which then promulgate the rates to service members. The BAH rates take effect in January of the next calendar year.

#### **G. OUT OF POCKET (OOP)**

Before calendar year 2005, OOP expenditures were included in the calculation of BAH rates. OOP, often referred to as absorption, is the excess portion of housing expenditures that the services members must pay. OOP percentage varies by paygrade; however, the percentage is the same at all locations. Again, the percentages differ for service members with dependents and those without dependents.

In FY05, DOD was successful in reducing OOP to 0 percent for the median BAH recipient. According to Tim Fowlkes, BAH Director at OSD (P&R), BAH compensation has increased by 41 percent from FY01 to FY05 (Mr. Fowlkes, personal communication, March 7, 2005). While this accomplishment substantially increased BAH amounts provided to eligible service members, BAH recipients below the median continue to absorb out of pocket expense. However, it appears that the 41 percent increase in BAH will likely have a positive affect on retention. “I do not see how an average 41 percent increase in housing allowances over the past 5 years could do anything but improve retention of high quality personnel. It is a major portion of an overall compensation package within the DoD that attempts to recruit and retain high quality people.” (Mr. Fowlkes, personal communication, March 7, 2005)

#### **H. DOD GUIDANCE**

Since the DOD is continually interested in improving the quality of life for service members, one way to achieve this goal is by providing a higher quality of housing. In order to achieve this higher standard, DOD’s focus is on ways to improve the methodology used in determining housing requirements. During 2002, OSD (P&R) issued new policy guidance that calls for a consistent DOD wide methodology. This methodology consists of a standardized housing requirement process that evaluates the housing needs of service members while simultaneously considering the influence of factors associated with the local housing market. Mr. Fowlkes, the director of Basic Allowance for Housing had this comment in reference to the BAH program. “I believe that the Basic Allowance for Housing is an accurate, fair program that provides an allowance for members to obtain housing in their local area of assignment, which is equal to housing typically obtained by their civilian counterparts of equivalent income. The program represents an improvement over the previous, spending-based program.” (Mr. Fowlkes, personal communication, March 7, 2005)

#### **I. HOUSING REQUIREMENT DETERMINATION PROCESS (HRDP)**

The goal of HRDP (Runzheimer International, 2004) is to standardize the housing requirements determination process utilized by each military service within the DOD. The HRDP is an attempt to consolidate the current processes into a single, consistent DOD wide tool for calculating military housing requirements. The HRDP intends to

utilize current DOD's limited resources more efficiently. One example includes a HRDP process that evaluates and determines the current requirements of military housing. Evaluations and determinations focus on the requirements needed to either build or retain government housing. Decisions are evaluated based on the following factors: market segmentation, bedroom requirements, market area, floor requirements, and transition strategy.

The current DOD policy is to provide military housing only where necessary to efficiently use current limited resources. This becomes especially important since military housing is 10-15 percent more expensive than PPV. (Runzheimer International, 2004) PPV addresses this issue by providing a viable solution to housing shortages. "I think that PPV and all of the privatization efforts among the Services have made huge strides in helping the Department reduce the number of substandard housing units in the US. It has helped us to get better housing for many members living on base and in the local communities. I cannot predict the long term success of the program, however, given the situation we faced five years ago (many more substandard units and decreasing budgets with which to address that problem), I don't see how anyone could view the program as less than successful." (Mr. Fowlkes, personal communication, March 7, 2005)

#### **J. HOUSING REQUIREMENTS MARKET ANALYSIS (HRMA)**

HRMA maximizes service members' reliance on the civilian sector housing in local communities and identifies shortfalls in the supply within these communities. After identifying shortfalls, DOD attempts to compensate the shortfalls with government housing. The numbers of required government housing units are based on the following: location of military community, targeted economic relief effort needed (Quality of Life), historic housing characteristics and community housing shortfall. Military housing requirements are equal to the current number of military housing units plus the community shortfall of housing available. (Runzheimer International, 2004)

#### **K. METHODOLOGY**

The HRMA methodology consists of five elements. The first element identifies the current number of military families that need housing. This process consists of counting the total number of families assigned to an installation and subtracting out

military couples, unaccompanied service members (there is this assumption that their family is already located in housing) and homeowners.

The second element of HRMA consists of a process used to determine housing floor requirements. This process considers the size of house that a family needs in relation to its number of family members. Generally speaking, the larger the family, the more space they rate.

The third element consists of a process that analyzes the current housing market conditions. Evaluations based upon trends associated with quality, supply (rental vs. owner-occupied), vacancy rates and new housing construction.

The fourth element consists of a process that determines price and bedroom segmentation parameter. This process focuses on the type of housing that local civilians receive based on their salaries. Service members' pay corresponds with their civilian counterparts and their equivalent types of housing are identified based on paygrade.

The last element measures market absorption and market response. Based on the size and economic strength of local communities, can it handle the housing needs of service members. The market response indicates how the housing rental market will handle the need in a monetary measure. It answers questions such as, "will a sudden demand in rental housing cause the rental prices to drastically increase?"

It is important to note that while there will be differences in the results based on the location of the MHA, several factors consistently affect the results. The first factor that normally affects results is the number of bathrooms and side walks. This is self-explanatory in that most families desire more bathrooms and easy access to their home. This will cause the price of housing to rise with the number of bathrooms and sidewalks. Other factors can be associated with high-rise complexes and mobile homes, because they are usually less expensive than single-family homes. Vacancy rates are important because they are an indication of the level of housing supply. Crime rates, quality of schools and condition of neighborhood are also factors that greatly affect the results. (Runzheimer International, 2004)

## **L. HRMA RESULTS**

The HRMA process estimates the availability of rental housing based on changes in vacancy rates and estimated new construction resulting from changes in demand. The process provides annual estimates of the rental housing market's ability to support additional military families, how the local rental market is likely to absorb or respond with additional housing as military transition to off-base housing, and a more realistic estimate of the military housing needs based on local housing market conditions.

It is important to note that one of the assumptions built into the process is that military families compete for housing. In this competition, their paygrade and number of dependents influence the number of bedrooms that service members choose. Additionally, the type of housing that service members choose usually costs no more than their BAH, which is based on their local median housing cost. Lastly, there is an assumption that military families will get their fair share of available housing based on the supply. (Runzheimer International, 2004)

## **M. COMPARISON**

The BAH standardization process and HRMA have a few differences. The first difference is that they both have different objectives. The BAH standardization process identifies median housing costs while the HRMA process counts the number of housing units. Another difference is the current information that HRMA provides. HRMA utilizes annual housing data while the BAH standardization process uses survey information that normally spans over a few years.

The two separate processes also have some of the same characteristics. Both processes rely on accurate information from third parties, which includes local real estate professionals, housing office personnel and published market reports. The third party acts as a check and balance approach to assure the accuracy of the data collected in the process. Additionally, both processes share subjectivity concerning differences in quality standards. Some of these differences attribute to distance and high versus low cost areas. All of these factors produce inaccuracy in the estimation process. In order for both processes to be successful, it is critical that BAH and HRMA have full support of the stakeholders involved in the process.

## **N. STAKEHOLDERS REVIEW**

One of the most important stakeholders is the OSD (P&R, MPP, and Comp). Their responsibility is to ensure that each service's budget planners are using accurate information in their estimation process. OSD (P&R) is ultimately responsible for reviewing housing data and its validity. The results from the trend analysis and evaluations must make common sense. OSD (P&R) must ensure that MHO and each service continuously evaluate their estimation process for problems and improvements. One example includes the relaying of updates to their estimates in the BAH process to each of the services who are responsible to OSD (P&R) for their estimate of the BAH expenditures years prior to its execution.

Another stakeholder is the local housing offices and the installation leadership at each MHA. Their responsibility is to help identify the practicable rental housing market based on commute distance, quality, and safety. It is their responsibility to ensure that they exclude undesirable areas from their surveys. They work with BAH estimators and HRMA contractors to assess local market conditions in order to provide a fair assessment. Additionally, they review the assumptions and conclusions drawn by contractors. During this process, they consider the housing needs of service members.

P&R at the service level becomes an important stakeholder in this part of the BAH process. They estimate their service level BAH expenditures two years prior to the budget year's execution. During this part of the BAH process, there appears to be an information gap. This gap occurs between the time that each service receives the actual published BAH rates from OSD (P&R) during the November timeframe and the time that they actually submit their BAH expenditure estimates to OSD (P&R). The flaw in the BAH process is that the rates are published too late in the PPBE process. This creates a problem, which prevents the services from accurately forecasting future BAH expenditures.

The length of time between the two events is approximately two years. The accuracy of P&R planning estimates are not known until after the BAH rates are published. Sometimes this creates differences in the estimates and actual expenditures that range in the millions of dollars. In order to make up for these differences, offsets are

made to other programs' funding. Budget planners are impacted in that they waste time each year to correct these differences. If the process was correct, they could focus their attention on more important aspects of the budget. Service members' impacts include the loss associated with the offsets made to other programs.

However, since service members have received a 41 percent increase in BAH within the last five years, it is clear that the fairness of the housing allowance is not a problem. The problem involves an information gap as described above between each service level P&R and OSD (P&R). This information gap needs to close in order to make the process more efficient.

## **O. SUMMARY**

As the OSD (P&R) and Runzheimers evaluate rental-housing factors for the estimation of BAH, it is important to remember their intent of helping the DOD maintain its policy of providing fair housing allowances to service members and to use community resources first to provide housing to military members. Current estimates indicate that approximately 30 percent of service members reside in military housing due to these limited housing supplies. Differences in the BAH rate can be attributed to service member's paygrade, dependency status and location of duty station. The BAH standards are established as a means for the DOD to compensate service members so that they are able to obtain comparable housing to that of the local civilian sector. It appears that the current large increases in the BAH entitlement will positively influence service members to continue their career in the military. These increases appear to eliminate past problems associated with BAH's failure to compensate service members for their housing expenditures. The BAH process seems to be almost perfect; however, there appears to be a flaw consisting of a gap in the information flow between two of the stakeholders. The next chapter will evaluate the effectiveness of the current DOD housing program and analyze the information gap between OSD (P&R) and the service level P&R.



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## **V. INFORMATION GAP AMONG STAKEHOLDERS**

In this Chapter, I will identify and analyze the current problems that exist within the BAH process. This chapter will begin with issues that brought this problem into the forefront. Next, information gaps that exist between OSD (P&R) and the service level P&Rs will be examined. Topics such as problems surrounding the resourcing aspects of BAH and the less than optimal timing of the housing survey results by OSD (P&R) will also be discussed.

### **A. DRASTIC HOUSING COST INCREASES**

From 1998 to 2005, average housing prices across the country have risen drastically. In some sections of the U.S., home values have increased as much as twenty percent within one year. As a result, numerous people are not able to finance the purchase of their home. With the inability to purchase their homes, these people must use the rental market to obtain affordable housing. This has increased the rental occupancy rates in most areas within the U.S., increasing the demand for rental housing. Moreover, as the demand continues to increase, housing rental prices increase along with its demand. As the rental prices increase, so do their influence on BAH. However, until after the housing survey information has been collected and analyzed, these increases are not known. The influence of these increases on BAH results in the increase of future BAH rates established by the OSD. Therefore, it is important to ensure that service members receive beneficial BAH rates by ensuring the rates are based on current and up-to-date housing information. Still, the problem does not stop here. The new supply of housing tends to favor people with higher incomes.

### **B. HOUSING SUPPLY LEVELS**

The majority of housing developers focus on the needs of upper-level income earners. This excludes many junior service members from obtaining affordable housing. “New multifamily construction largely targets higher income renters, setting new records in terms of average size and other amenities. Moreover, during the past four years, the median asking rent for new apartments has shot up an inflation-adjusted 15 percent—four times faster than the increase in new home prices. With a median asking rent of \$920, new units are beyond the reach of two-thirds of today’s renter families.” (US Census

Bureau Housing Vacancies and Homeownership, 2005) In chapter IV, I examined the BAH standardization process and how the DOD uses it to establish rates that enable service members to obtain housing comparable to their civilian counterparts. From the process, it becomes obvious that DOD's methodology for collecting housing costs from surveys and analyzing trends can accurately determine an adequate BAH rate to cover the cost of housing for service members. This establishes the adequacy in the BAH entitlement for service members.

### **C. PAST TRENDS**

However, after reviewing the entire process in detail and receiving input from various key stakeholders, there needs to be some improvement made to the methodology. The current process appears to operate efficiently whenever there are slow and consistent changes in the rental housing market. This becomes evident from the results of the BAH budget. Nevertheless, if you review the differences for the time period associated with the drastic increases of vacancy rates, the BAH expenditures have varied from their estimated amounts. This appears to be a consistent trend across all four services. Missed estimates by each service for fiscal years 2001-2003 are presented in Table 1.

Table 1. Service Estimates Percentage Differences

Service	FY01	FY02	FY03
Air Force	2.7	15.8	17.9
Marine Corps	8.2	5	20.5
Navy	7.2	6.8	11.8
Army	4.5	N/A	N/A

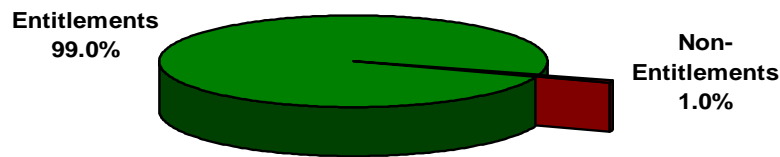
The Air Force missed their BAH estimates by 2.7 percent, 15.8 percent and 17.9 percent, for Fiscal Years 2001, 2002, and 2003, respectively; the Marine Corps missed their BAH estimates by 8.2 percent, 5 percent and 20.5 percent; the Navy missed their BAH estimates by 7.2 percent, 6.8 percent and 11.8 percent. The Army is an exception due their lack of published information. However, for 2001 they did report they underestimated BAH expenditures by 4.5 percent. (USDComptroller, 2005)

## **D. PROBLEMS**

### **1. Lack of Flexibility in MILPERS Appropriation**

Whenever these estimates are not accurate, it creates a list of problems for the budget analyst at the service level P&R, because BAH is an entitlement. In Chapter II, I covered how U.S. Code Title 37, Pay & Allowances Ch. 7, Section 403 establishes BAH as an entitlement. This entitlement becomes a legal obligation for the federal government, which obligates BAH payment to any service member that meets the eligibility requirements. Figure 2 illustrates the portion of MPMC entitlements required by Title 37 in comparison to non-entitlements.

Figure 1. Percentage of MPMC Entitlements and Non-entitlements



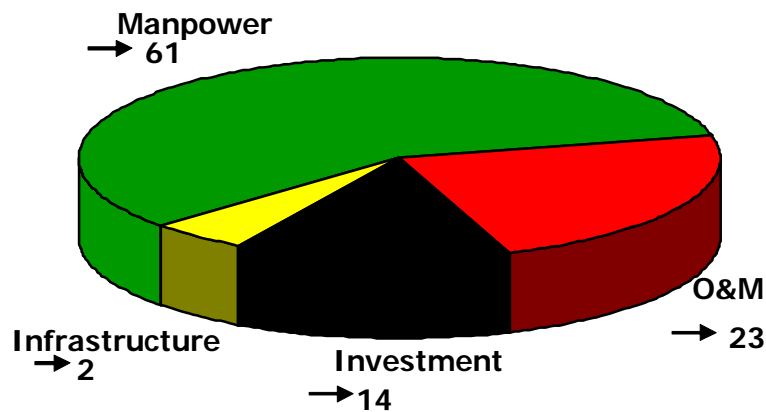
A problem occurs when adjusting the budget. A service cannot choose to not pay the BAH entitlement due to insufficient funds. As a result, whenever there is a shortfall in the BAH budget, funds must be added (supplemental appropriations) or taken (reprogramming) from existing programs. This results in adjustments to other programs within the defense budget. To avoid a potential Anti-Deficiency Act (ADA) violation, each service must take funds from a program of lesser priority to make up the difference in the funds added to the BAH budget. This may appear insignificant at first glance, especially since the PPBE process allows the services to correct their missed estimates. However, this creates a domino effect that leads to a series of other problems.

The next chapter will evaluate these problems and recommend solutions. However, the main problem is that since there is so little flexibility in the MPMC account due to the mandatory/entitlement nature of pay and allowances, funds must generally be

transferred from procurement (PMC) or operations and maintenance (O&M) to pay manpower bills like BAH. This has had and will probably continue to have a major impact on new equipment (procurement), modernization, and operations and maintenance support that ultimately impacts readiness.

An example includes the Marine Corps Manpower budget. The USMC allocates the highest percentage of its budget to Manpower expenditures. The portion allocated to Manpower accounts for approximately 61 percent of the USMC's Total Obligation Authority (TOA).

Figure 2. Total Obligated Authority



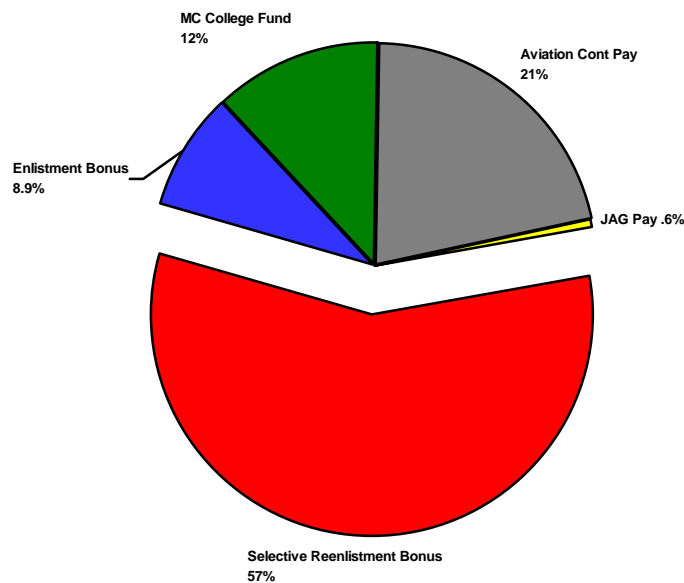
The Manpower budget separates into two accounts. The first account is MPMC, which consist of funding for active duty service members. The second account consists of RPMC, which consist of funding for reserve service members. The flexibility to reprogram funds within these accounts is very limited, since approximately 99 percent of expenditures are non-discretionary, including entitlements such as pay and allowances, BAH, retirement accrual, and special pays. Since discretionary entitlements must be paid and are a direct function of the payment rate and Manpower strength, the USMC cannot avoid these expenses. (Maj Edwards, 2005)

## 2. Spillover Effects

This problem branches out into other areas of the budget. It may appear ideal to utilize the remaining one percent of the Manpower budget to offset BAH and other entitlement shortfalls, but that one percent is allocated to recruiting and retention

bonuses, like Enlistment Bonus (EB) and Selective Reenlistment Bonus (SRB). Figure 5 displays the remaining one percent of the non-entitlement area of the MPMC budget.

Figure 3. MPMC Non-entitlements



According to Major Edwards, M&RA (MPP40), the Marine Corps already allocates the smallest percentage (less than 1 percent) of its MILPERS budget towards recruiting and retention. Thus, to transfer funds from Selective Reenlistment Bonus to pay BAH bills would dramatically reduce the Marine Corps ability to retain and shape its career enlisted force. (Edwards, 2005) Accordingly, funds to pay BAH bills are more likely to be sourced external to the MPMC account.

### 3. Less than Optimal Timing

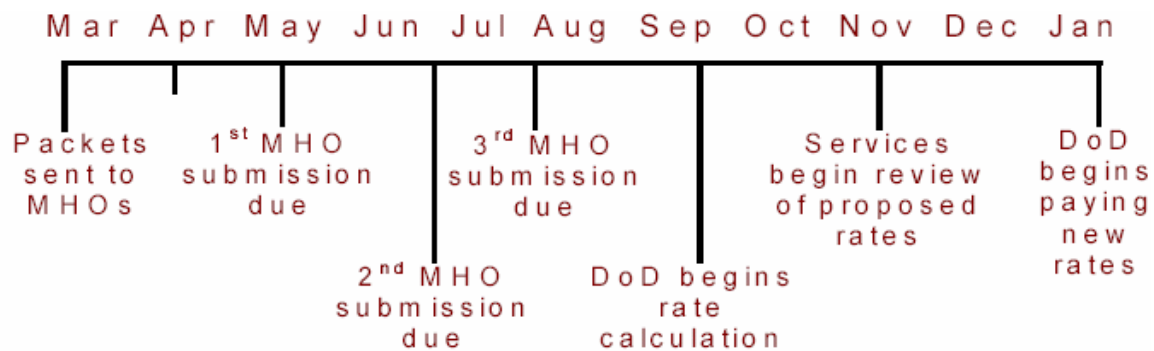
The problem with differences in the BAH budget estimates are not recognizable until OSD (P&R) publishes the actual BAH rates. Thus, the timing of OSD's (P&R) release of BAH rates is another problem in the current process. The rates are released only two months prior to the year of execution. Once these rates become published, budget analysts are able to determine if their estimates are correct. In the case of shortfalls, the services have little choice other than to pay the 'bill' and attempt to

reallocate funds internally or request supplemental funds from Congress. It does not appear that the current process of requiring the services to submit their BAH expenditure estimates two year prior to execution is reasonable given the current dynamic housing market. A budget analyst would almost need a crystal ball to predict accurate future BAH expenditures in the current environment. The result of this requirement is that the process punishes the services with inefficient processes and requirements.

#### 4. The BAH Stakeholder Information Gap

The real problem appears to be poor communication. The services are not able to receive BAH rate information in a timely manner. The communication of BAH rates occurs too late in the process; if received earlier, it could prevent unnecessary internal budget changes, such as the budget offsets discussed earlier. Figure 5 displays the timeline for OSD's housing data collection process and their publication of BAH rates. The rates are not available for review by the services until November, giving them only two months to make their budget offsets.

Figure 4. Data Collection & Submission Process (DODBAH, 2002)



Within the lines of communication, there is a lack of direction by the OSD (P&R). The following comment is one illustration of this fact. It details existing problems within the current system.

BAH rate increase is provided in a PBD and does not accurately represent the cost increase we actually incur. As a result, additional costs are absorbed through other programs within the MILPERS budget. Although I understand the rationale for the timing (to ensure the service members get paid the most current costs), the budget process seems to consistently

short change the services and does not allow for the correct funding which ultimately hurts the services. (LtCol Gallant)

#### **E. SUMMARY**

In this chapter, I outlined the problems that occur within the BAH estimation process and the information gap that exists between OSD (P&R) and the service level's P&R. In the next chapter, I will provide recommendations and solutions that address the problems associated with resourcing difficulties for BAH funding. Additionally, I will suggest recommendations that provide more efficient program management, which avoids year of execution bills.



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## **VI. RECOMMENDATIONS AND CONCLUSION**

This chapter reviews the problems and issues discussed in the previous chapter. From these problems, I will suggest alternative courses of action, which, if implemented, will eliminate inefficiencies within the BAH process. The information gap that exists between OSD and the service level P&Rs begins the focus of this chapter. The elimination of this information gap could result in the reduction of additional inefficiencies. I will also make suggestions that, if implemented, will modify the current PPBE process to allow for more accurate planning, programming, and budget execution. This desired end state is to minimize or eliminate execution year BAH funding shortages, or 'bills'. Each recommendation needs buy-in from the stakeholders before their implementation.

### **A. RECOMMENDATIONS**

#### **1. Standardized Process**

My first recommendation is to improve the communication among stakeholders of the PPBE process. This is the single most important change that could inspire other subsequent beneficial changes leading to improvement. Improved communications can take several forms. One form uses a standardized process for projecting BAH costs for all of the services within the DOD. This requires OSD to develop a model to forecast housing costs by MHA and provide the data to the service P&R early in the PPBE cycle so it can be incorporated in the MILPERS BES. This recommendation would eliminate some of the variance between the current practice of using a standard inflation factor (e.g. 3.1 percent) and actual BAH costs. As discussed throughout this thesis, the variance between these two figures has been greater than \$100M. By using more accurate, MHA specific data, the services should be able to reduce this variance.

##### ***a. Access to MHO Website***

This website contains up-to-date information from each MHA on local housing information and is part of DOD's housing survey process. If each service had access to this information and used it in the same process as DOD to estimate the BAH rates, this could eliminate any differences associated in the estimated budget amounts. In other words, if each service used the same model as OSD and the same housing

information, they could estimate the same BAH rates as OSD. In return, they could use these rates to more accurately estimate their annual BAH expenditures. Access to this information could also assist the services during the programming phase of PPBE, when the services need accurate information to project costs through the FYDP.

The MHO website, in conjunction with the improved forecasting model, will enable the services to further reduce the variance between the BES/FYDP BAH cost and actual BAH execution. As an input from local housing offices, the MHO website relays information to Runzheimer International. They collect local housing information from housing offices and consolidate it into an on-line database. Later, they analyze this information to determine BAH rates. The importance of this database is the nature of the information it provides, specifically real time data. If each service had the ability to link their BAH estimation model or program to the current information in this website, more errors could be removed from the current estimation process.

***b. Information Flow***

The current information flow structure is a vertical descending flow from OSD to the remaining stakeholders. This structure has proved to be successful in the past and one could argue that ‘if it is not broke, don’t try to fix it’. However, this argument does not take into account the opportunity costs associated with inefficiency. The information flow needs to be more horizontal, gathering input from each service and encouraging them to work together to continuously improve the system.

In addition, best practices (benchmarking) should be identified by OSD and shared to enable the services to internally audit their BAH program and implement change where needed. This would create an environment of innovation and creativity vice the current structured approach that discourages innovation.

The current information flow closes off certain information from other stakeholder’s involvement at the same level. One example involves each service’s model for estimating BAH expenditures. While researching information for this thesis, I perceived competition between the services. The perception involved each service trying to create a picture that relayed that their operation was more efficient than the other services’. This encourages different methodologies, which shapes the data to fit the

message each service is trying to send about efficiency. With OSD direction, the services could be encouraged to share information and ‘benchmark’ best practices that could ultimately improve the management of BAH throughout DOD.

## **2. PPBE Process**

Another important recommendation involves the publishing BAH rates by OSD (P&R). As stated throughout this thesis, the actual BAH rate is not determined until approximately one month prior to implementation. This creates a ripple affect throughout the PPBE process. Programming (FYDP) projections use a single cost inflation factor (eg; 3.5%) vice more accurate, MHA level rate data. “BAH rate increase is provided in a PBD and does not accurately represent the cost increase we actually incur. As a result, additional costs are absorbed through other programs within the MILPERS budget. Although I understand the rationale for the timing (to ensure the service members get paid the most current costs), the budget process seems to consistently shortchange the services and does not allow for the correct funding, which ultimately hurts the services.” (LtCol Gallant, 2005) The problem with differences in the BAH budget estimates are not recognized until OSD (P&R) publishes the actual BAH rates. The problem is related to the timing of OSD’s (P&R) release of the BAH rates.

To address this problem, OSD needs to keep each service P&R informed of the results from the data collected during housing surveys. During the collection and analysis process, each service P&R needs to have access to this information and adjust the funding levels maintained in the Comptroller Information System (CIS). The CIS is the official OSD record of the budget estimates as submitted by the DOD components and adjusted by SECDEF decisions through PBDs. This allows planners the ability to plan more accurately and eliminate their reliance on averages for estimations.

### ***a. Top-line funding to cover BAH Rate Change***

Another recommendation involves OSD modifying the PPBE process. The modification would require OSD to issue PBDs that enable the services to adjust BAH estimates based on updated rate information. Specifically, the services would be provided additional funding via PBD. So that this change is not an ‘unfunded mandate’, the resources to pay this bill should come from an accrual account (eg; Retirement Pay

Accrual) established to fully fund rate change related bills. Additional research should be conducted to determine a suitable source of funds to pay this bill.

## **B. OBSERVATIONS AND RECOMMENDATIONS**

During my research, my contact with LtCol Gallant, an important stakeholder from Marine Corps P&R, brought to light many problems and recommendations that need an internal solution to fine-tune the current process within the Marine Corps. The following are the observations and recommendations that resulted from our communication.

### **1. Manpower Data**

When P&R receives information from M&RA, the information should confirm to a format that is more usable. “In the short term, I would like to obtain BAH actuals from M&RA each month just like we get actuals for the manpower plan itself. I would like the actuals to be broken out by the different types of BAH and OHA.” (LtCol Gallant, 2005) M&RA has a proprietary system, the Total Force Data Warehouse (TFDW), which enables analysts to access MCTFS data, like Marines who currently receive BAH by paygrade, dependency status, and numerous other variables. According to Major Edwards, M&RA (MPP40), this recommendation has been implemented. (Edwards, 2005) Edwards also states that MPP40 and RFM (where LtCol Gallant works) communicate on a daily basis and intend to work together to improve the interface between M&RA and P&R.

### **2. Improve MCTFS**

Again, MCTFS is not currently accurate enough to meet this demand. First, it is not accurate in some of its reports. MCTFS is a slow system in that it updates and extracts information twice a month. “MCTFS provides us average strengths for the month; I know it is inaccurate because if retro-active diaries are executed, prior months are not taken into consideration.” (Lt Col Gallant, 2005) MCTFS does not allow for the real-time reporting of current information. It was revolutionary in its introduction but currently its operation and capabilities have become obsolete when compared to current systems utilized by the civilian sector. As noted above, the TFDW may be part of the solution to this problem. TFDW may have the capability to improve this process. Further research of this issue is recommended.

### **3. Internal Standardization**

There needs be internal standards implemented that require direct reports of information surrounding PPV and other initiatives. “Current procedures are not uniform for members in PPV. At some commands, members have their BAH paid through a unique pay code in MCTFS that identifies the payment as a PPV payment. At other commands, members may be paying by an allotment that does not designate it as a PPV payment. As such, I cannot query the system to obtain PPV numbers and must rely on I&L. I would like payments to PPV to be uniform and made through the MCTFS pay code that is designated PPV. This will enable me to obtain data more readily.” (LtCol Gallant, 2005) As new programs are implemented into the PPBE process, the information flow should incorporate stakeholder’s needs and demands. The solution of standardization will attempt to address these problems and further prevent their reoccurrence.

### **C. SUMMARY**

This chapter concludes this thesis. It reviewed current problems and issues within the BAH process while suggesting alternative courses of action. These recommendations aim to eliminate inefficiencies and improve processes within the BAH process. The information gap that exists between OSD and the service level P&Rs is an important problem that needs a solution. Its elimination will result in the reduction of additional inefficiencies. The most important recommendation involves avoiding year of execution bills. Without buy-in from each of the stakeholders, these problems will continue to plague the current process. The current BAH program meets its goal of providing service members fair compensation for housing; however, the process it uses to achieve this goal needs some work. The current PPBE system, information flow, and technology need adjustments to allow for a more efficient BAH program. If adjusted the BAH process will operate more smoothly and simultaneously provide service members with fair housing compensation.

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